



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
ENERGY CENTER – ENERGY REVOLVING FUND  
**LIGHTING FIXTURE UPGRADE/MOTION SENSOR WORKSHEET**

BUILDING	LOCATION	DATE
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To estimate the savings when more efficient lighting is installed, the following information must be known:

- The number of old fixtures being changed.
- The wattage of each old fixture.
- The number of hours of use per year in the past.
- The number of new fixtures being installed.
- The wattage of each new fixture.
- The number of hours of use per year in the future.
- The cost per kilowatt hour of electricity.

### SAVINGS CALCULATIONS

1. Enter the number of old fixtures being changed ..... \_\_\_\_\_
2. Enter the wattage of each old fixture ..... \_\_\_\_\_
3. Enter the hours of use per year in the past ..... \_\_\_\_\_
4. Enter the cost per kilowatt hour of electricity ..... \_\_\_\_\_
5. Multiply line 1 by line 2 by line 3 by line 4 and divide by 1000 ..... (Present annual cost of lighting) ..... \$ \_\_\_\_\_/year
6. Enter the number of new fixtures being installed ..... \_\_\_\_\_
7. Enter the wattage of each new fixture ..... \_\_\_\_\_
8. Enter the new hours of use per year in the future ..... \_\_\_\_\_
9. Enter the cost per kilowatt hour of electricity ..... \_\_\_\_\_
10. Multiply line 6 by line 7 by line 8 by line 9 and divide by 1000 ..... (Future annual cost of lighting) ..... \$ \_\_\_\_\_/year

### ANNUAL SAVINGS

11. Subtract line 10 from line 5 ..... \$ \_\_\_\_\_/year

### PROJECT COST

12. Enter the total cost to modify the lighting including material, labor and design ..... \$ \_\_\_\_\_

### SIMPLE PAYBACK

13. Divide line 12 by line 11 ..... \_\_\_\_\_ years

## DESCRIPTION PAGE

### **Lighting Fixture Upgrade/Motion Sensor Energy - Conservation Measure**

Describe the existing system and the proposed energy-conservation measure (use additional sheets if necessary):